

0270  
#4

OIPE

ENTERED

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/680,858DATE: 10/19/2000  
TIME: 11:56:31Input Set : A:\CPG.txt  
Output Set: N:\CRF3\10192000\I680858.raw

```

3 <110> APPLICANT: Valigen, Inc.
4     Beetham, Peter
5     Avissar, Patricia
6     Walker, Keith
8 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR PLANT GENETIC MODIFICATION
10 <130> FILE REFERENCE: 49317-0272063
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/680,858
C--> 12 <141> CURRENT FILING DATE: 2000-10-06
12 <150> PRIOR APPLICATION NUMBER: US 60/158,033
13 <151> PRIOR FILING DATE: 1999-10-07
14 <150> PRIOR APPLICATION NUMBER: US 60/173,555
15 <151> PRIOR FILING DATE: 1999-12-30
18 <160> NUMBER OF SEQ ID NOS: 14
20 <170> SOFTWARE: PatentIn version 3.0
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 68
24 <212> TYPE: DNA
25 <213> ORGANISM: synthetic construct
27 <220> FEATURE:
W--> 28 <221> NAME/KEY: modified_bases
29 <222> LOCATION: (30)..(39)
30 <223> OTHER INFORMATION: 2'-O-ribonucleosides
32 <220> FEATURE:
W--> 34 <221> NAME/KEY: modified_bases
35 <222> LOCATION: (45)..(54)
36 <223> OTHER INFORMATION: 2'-O-ribonucleosides
39 <400> SEQUENCE: 1
40 gaggccaagt gcaacgtagg atgattttta ucaaccuacg ttgcacuga ccugggcggt 60
42 tttagcgc 68
45 <210> SEQ ID NO: 2
46 <211> LENGTH: 68
47 <212> TYPE: DNA
48 <213> ORGANISM: synthetic construct
50 <220> FEATURE:
W--> 51 <221> NAME/KEY: modified_bases
52 <222> LOCATION: (30)..(39)
53 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
56 <220> FEATURE:
W--> 57 <221> NAME/KEY: modified_bases
58 <222> LOCATION: (45)..(54)
59 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
62 <400> SEQUENCE: 2
63 caagatcaagt gctacgtagg atgattttta ucaaccuacg tagcacuga ccugggcggt 60
65 tttagcgc 68
68 <210> SEQ ID NO: 3
69 <211> LENGTH: 24
70 <212> TYPE: DNA

```

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/680,858

DATE: 10/19/2000  
 TIME: 11:56:32

Input Set : A:\CPG.txt  
 Output Set: N:\CRF3\10192000\I680858.raw

```

71 <213> ORGANISM: Aequorea victoria
73 <400> SEQUENCE: 3
74 atgggtgagca agggcgagga gctg
77 <210> SEQ ID NO: 4
78 <211> LENGTH: 68
79 <212> TYPE: DNA
80 <213> ORGANISM: synthetic construct
82 <220> FEATURE:
W--> 83 <221> NAME/KEY: modified_bases
84 <222> LOCATION: (30)..(39)
85 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
88 <220> FEATURE:
W--> 89 <221> NAME/KEY: modified_bases
90 <222> LOCATION: (45)..(54)
91 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
94 <400> SEQUENCE: 4
95 gtaagcaagg gctgaggact gtctattttt gaacagcucc tggcccuugc ucacgcgcgt
97 tttagcgc
100 <210> SEQ ID NO: 5
101 <211> LENGTH: 68
102 <212> TYPE: DNA
103 <213> ORGANISM: synthetic construct
105 <220> FEATURE:
W--> 106 <221> NAME/KEY: modified_bases
107 <222> LOCATION: (30)..(39)
108 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
111 <220> FEATURE:
W--> 112 <221> NAME/KEY: modified_bases
113 <222> LOCATION: (45)..(54)
114 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
117 <400> SEQUENCE: 5
118 taagcaaggg ctgggagctg ttacttttg ugaacagcuc cgagcccuug cucagcgct
120 tttagcgc
123 <210> SEQ ID NO: 6
124 <211> LENGTH: 68
125 <212> TYPE: DNA
126 <213> ORGANISM: synthetic construct
128 <220> FEATURE:
W--> 129 <221> NAME/KEY: modified_bases
130 <222> LOCATION: (30)..(39)
131 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
134 <220> FEATURE:
W--> 135 <221> NAME/KEY: modified_bases
136 <222> LOCATION: (45)..(54)
137 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
140 <400> SEQUENCE: 6
141 caagtcgaagt gcaacgtagg atgattttta ucauccuacg ttgcacuuga ccuggcgct
143 tttagcgc
146 <210> SEQ ID NO: 7

```

21

60

63

60

68

60

68

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/680,858  
 DATE: 10/19/2000  
 TIME: 11:56:32

Input Set : A:\CPG.txt  
 Output Set: N:\CRF3\10192000\I680858.raw

```

147 <211> LENGTH: 68
148 <212> TYPE: DNA
149 <213> ORGANISM: synthetic construct
151 <220> FEATURE
W--> 152 <221> NAME/KEY: modified_bases
153 <222> LOCATION: (30)..(39)
154 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
157 <220> FEATURE
W--> 158 <221> NAME/KEY: modified_bases
159 <222> LOCATION: (15)..(54)
160 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
163 <400> SEQUENCE: 7
161 caggctcaagt gctacgtagg atgattttta ucauccuacg tagcacuuga ccuggcgcggt 60
166 tttagcgcc 68
169 <210> SEQ ID NO: 8
170 <211> LENGTH: 68
171 <212> TYPE: DNA
172 <213> ORGANISM: synthetic construct
174 <220> FEATURE
W--> 175 <221> NAME/KEY: modified_bases
176 <222> LOCATION: (30)..(39)
177 <223> OTHER INFORMATION: activity2'-O-methyl ribonucleotides
180 <220> FEATURE
W--> 181 <221> NAME/KEY: modified_bases
182 <222> LOCATION: (45)..(54)
183 <223> OTHER INFORMATION: activity2'-O-methyl ribonucleotides
186 <400> SEQUENCE: 8
187 gtgagcaagg gcgaggagct gtteattttt gaacagcucc tegcccuugc uacgcgcggt 60
189 tttagcgcc 68
192 <210> SEQ ID NO: 9
193 <211> LENGTH: 63
194 <212> TYPE: DNA
195 <213> ORGANISM: synthetic construct
197 <220> FEATURE
W--> 198 <221> NAME/KEY: modified_bases
199 <222> LOCATION: (30)..(39)
200 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
203 <220> FEATURE
W--> 204 <221> NAME/KEY: modified_bases
205 <222> LOCATION: (45)..(54)
206 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
209 <400> SEQUENCE: 9
210 taagcaagg ctcggagctg ttcacttttg ugaacagcuc cgagcccuug cucagcgcggt 60
212 tttagcgcc 68
215 <210> SEQ ID NO: 10
216 <211> LENGTH: 68
217 <212> TYPE: DNA
218 <213> ORGANISM: synthetic construct
220 <220> FEATURE:

```

RAW SEQUENCE LISTING                      DATE: 10/19/2000  
 PATENT APPLICATION:    US/09/680,858        TIME: 11:56:32

Input Set : A:\CPG.txt  
 Output Set: N:\CRF3\10192000\I680858.raw

```

W--> 221 <221> NAME/KEY: modified_bases
      222 <222> LOCATION: (30)...(39)
      223 <223> OTHER INFORMATION: activity 2'-O-methyl ribonucleotides
      226 <226> FEATURE
W--> 227 <221> NAME/KEY: modified_bases
      228 <222> LOCATION: (45)...(54)
      229 <223> OTHER INFORMATION: activity 2'-O-methyl ribonucleotides
      232 <232> SEQUENCE: 10
      233 ctgcttggtg aaatgctgat gtacttttta guacaucagc atttccacaa gcaggcgcggt 60
      235 tttagcgc 68
      238 <210> SEQ ID NO: 11
      239 <211> LENGTH: 68
      240 <212> TYPE: DNA
      241 <213> ORGANISM: synthetic construct
      243 <226> FEATURE
W--> 244 <221> NAME/KEY: modified_bases
      245 <222> LOCATION: (30)...(39)
      246 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
      249 <226> FEATURE
W--> 250 <221> NAME/KEY: modified_bases
      251 <222> LOCATION: (45)...(54)
      252 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
      255 <232> SEQUENCE: 11
      256 ctgcttggtg aaatgctgat gtacttttta guacaucagc atttccacaa gcaggcgcggt 60
      258 tttagcgc 68
      261 <210> SEQ ID NO: 12
      262 <211> LENGTH: 68
      263 <212> TYPE: DNA
      264 <213> ORGANISM: synthetic construct
      266 <226> FEATURE
W--> 267 <221> NAME/KEY: modified_bases
      268 <222> LOCATION: (30)...(39)
      269 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
      272 <226> FEATURE
W--> 273 <221> NAME/KEY: modified_bases
      274 <222> LOCATION: (45)...(54)
      275 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
      278 <232> SEQUENCE: 11
      279 cgtctccacc tagaatgacc gagaattttu ucucgggucat tctagauggg agcggcgcggt 60
      281 tttagcgc 68
      284 <210> SEQ ID NO: 13
      285 <211> LENGTH: 68
      286 <212> TYPE: DNA
      287 <213> ORGANISM: synthetic construct
      289 <226> FEATURE
W--> 290 <221> NAME/KEY: modified_bases
      291 <222> LOCATION: (30)...(39)
      292 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
      295 <226> FEATURE

```

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/680,858

DATE: 10/19/2000  
 TIME: 11:56:32

Input Set : A:\CPG.txt  
 Output Set: N:\CRF3\10192000\I680858.raw

```

W--> 296 <221> NAME/KEY: modified_bases
      297 <222> LOCATION: (15)..(54)
      298 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
      301 <400> SEQUENCE: 13
      302 aatgacactt cttaacacct caacgttttc guugaggugt taagaagugc cauugcgagt 69
      304 tttegcgc 68
      307 <210> SEQ ID NO: 14
      308 <211> LENGTH: 68
      309 <212> TYPE: DNA
      310 <213> ORGANISM: synthetic construct
      312 <220> FEATURE:
W--> 313 <221> NAME/KEY: modified_bases
      314 <222> LOCATION: (30)..(39)
      315 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
      318 <220> FEATURE:
W--> 319 <221> NAME/KEY: modified_bases
      320 <222> LOCATION: (45)..(54)
      321 <223> OTHER INFORMATION: 2'-O-methyl ribonucleotides
      324 <400> SEQUENCE: 14
      325 cgatgatccc aagtgggtgc acttttttta aagugccacc acttgggauc auegggcggt 69
      327 tttegcgc 68
  
```

VERIFICATION SUMMARY  
PATENT APPLICATION US/09/680,858

DATE: 10/19/2000  
TIME: 11:56:33

Input Set : A:\CPG.txt  
Output Set : N:\CRF3\10192000\I680858.raw

L:12 M:270 C: Current Application Number differs. Replaced Current Application No  
L:12 M:271 C: Current Filing Date differs. Replaced Current Filing Date  
L:28 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:1  
L:34 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:1  
L:51 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:2  
L:57 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:2  
L:83 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:4  
L:89 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:4  
L:106 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:5  
L:112 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:5  
L:129 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:6  
L:135 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:6  
L:152 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:7  
L:158 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:7  
L:175 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:8  
L:181 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:8  
L:198 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:9  
L:104 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:9  
L:221 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:10  
L:227 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:10  
L:144 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:11  
L:150 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:11  
L:267 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:12  
L:173 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:12  
L:190 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:13  
L:196 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:13  
L:313 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:14  
L:319 M:257 W: Feature value mis-spelled or invalid. <221> Name key for SEQ ID#:14